

I CLAIM:

1. A method for chrominance smoothing a digital color image which is characterized by a luminance-chrominance-chrominance channel-color-space representation, said method comprising

5 selecting an image region for smoothing attention,  
within that region further selecting pixels therein which have a luminance value that is on one side, in value, of a defined luminance threshold value, and  
changing the chrominance-channel values of such selected pixels so as to lower associated chrominance-channel entropy.

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2. The method of claim 1, wherein, with respect to each such selected pixels, chrominance-value changing, with regard to each chrominance channel associated with that pixel, is performed by shifting the pixels' chrominance value in that channel toward the same-channel chrominance value of non-selected, immediate-neighbor pixel.

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3. The method of claim 1, wherein, with respect to each such selected pixel, chrominance-value changing, with regard to each chrominance channel associated with that pixel, is performed by changing the selected pixels' chrominance value in that channel to be the same as that of a same chrominance-channel value of any non-selected  
20 neighboring pixel.

4. The method of claim 1, wherein, with respect to each such selected pixel, chrominance-value changing, with regard to each chrominance channel associated with that pixel, is performed by replacing the chrominance value of that pixel in that channel by an average of the same chrominance-channel values of non-selected pixel neighbors.

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5. The method of claim 1, wherein, with respect to each such selected pixel, chrominance-value changing, with regard to each chrominance channel associated with the pixel, is performed by replacing the chrominance value in that channel by an average of the same chrominance-channel values of pixels in a block which will be used in conjunction with the implementation of a compression algorithm.

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6. The method of claim 1, which is employed with respect to a block-based compression algorithm, and wherein, with respect to each such selected pixel, chrominance-value changing with regard to each chrominance channel associated with that pixel, is performed by replacing the pixel's chrominance value in that channel by that value which makes the average chrominance value for the encoding block which contains the selected pixel the same as the average chrominance value of the pixels in the previously encoded block.

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7. The method of claim 1 which is performed in conjunction with an image which is selected from the group consisting of (a) a still, stand-alone image, and (b) a still-frame in a sequence of images which collectively makeup a moving image.

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8. The method of claim 1, wherein the mentioned side of a defined luminance threshold value is toward the high side of that value.

9. The method of claim 1, wherein the mentioned side of a defined luminance  
5 threshold value is toward the low side of that value.